PARTS LIST Y19103

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Replaces Issue of 6/63

ROUND CASE INSTRUMENTS

MODELS 41, 43, 62, 68 AND 69

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BE SURE TO STATE MODEL AND SERIAL NUMBER OF INSTRUMENT WHEN ORDERING PARTS

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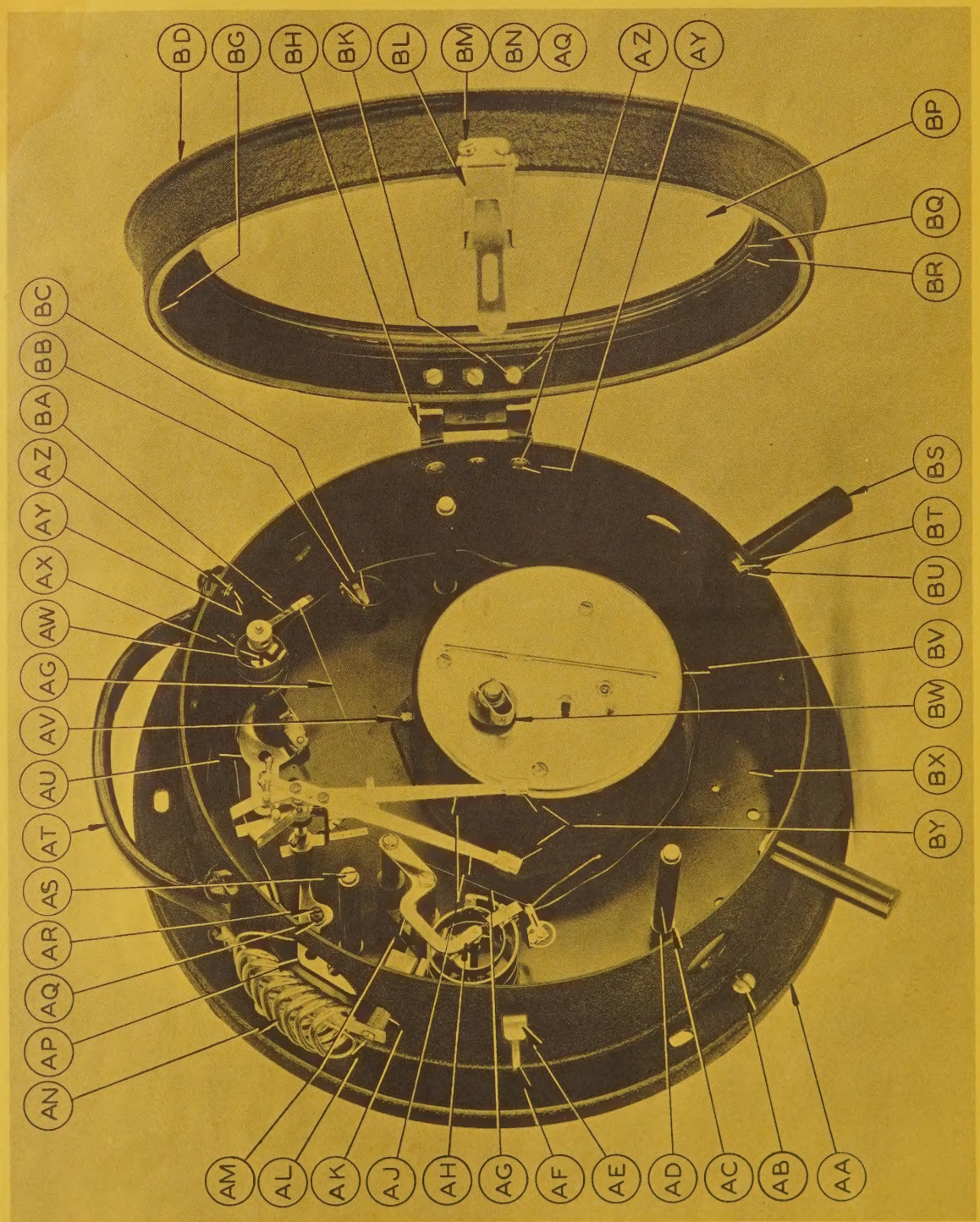


Figure 1 - Model 69 Instrument

* CAN BEARINGS BE ORDERED ON THIS MOTOR.

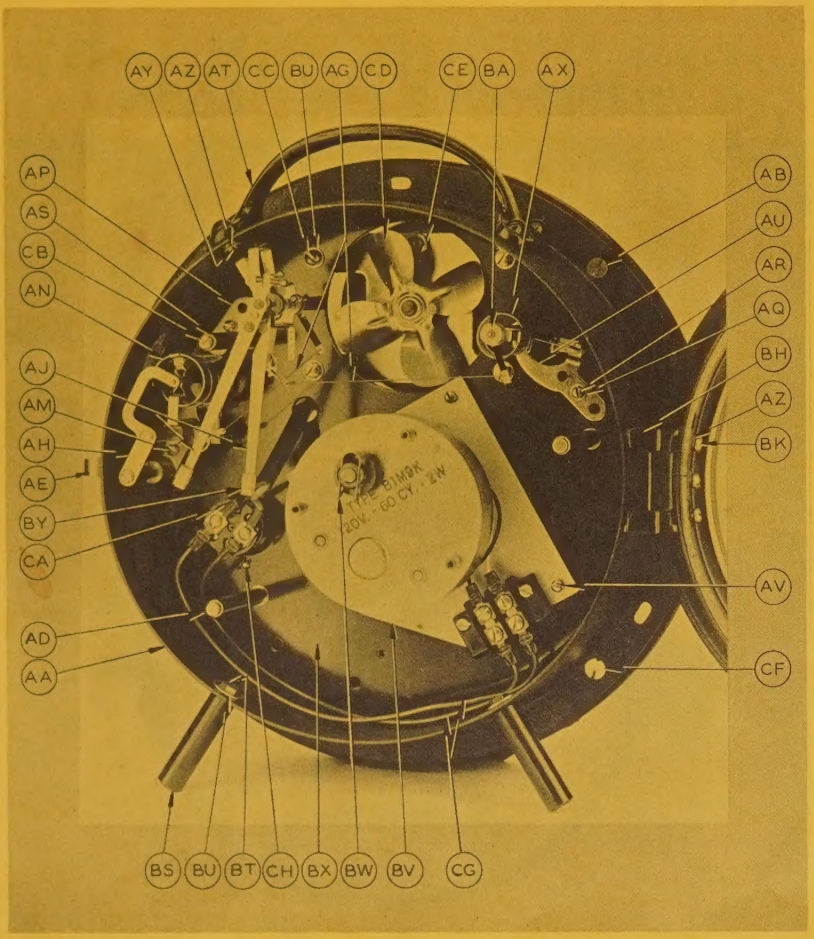


Figure 2 - Interior of Model F4069TH Thermo-Humidigraph

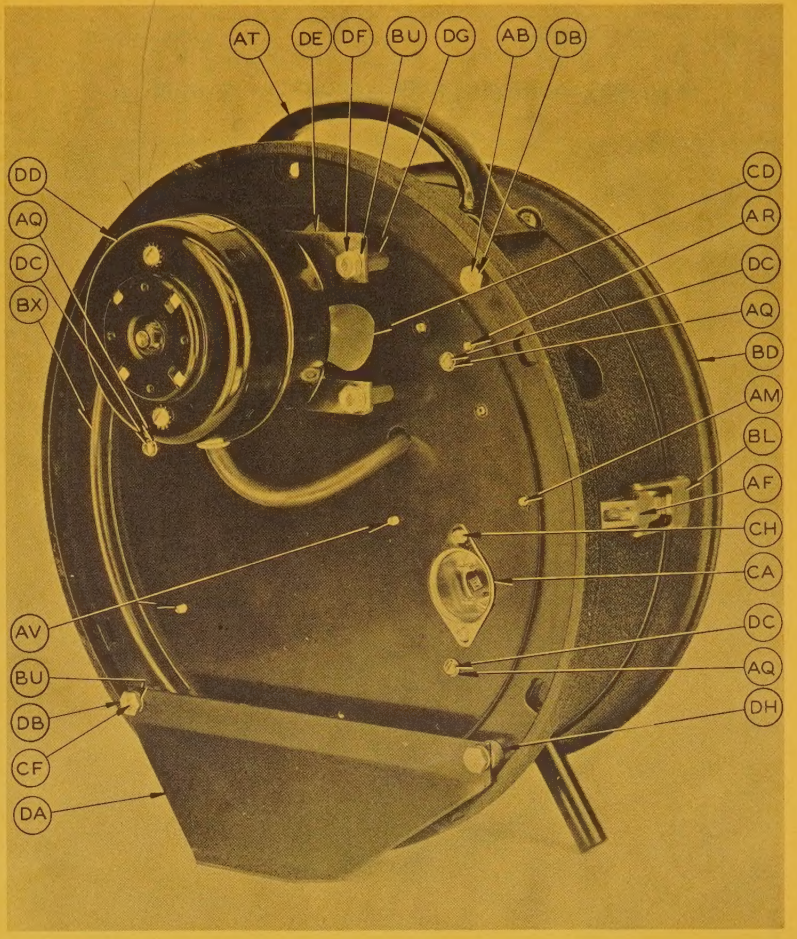


Figure 3 - Rear View of Model F4069TH Thermo-Humidigraph

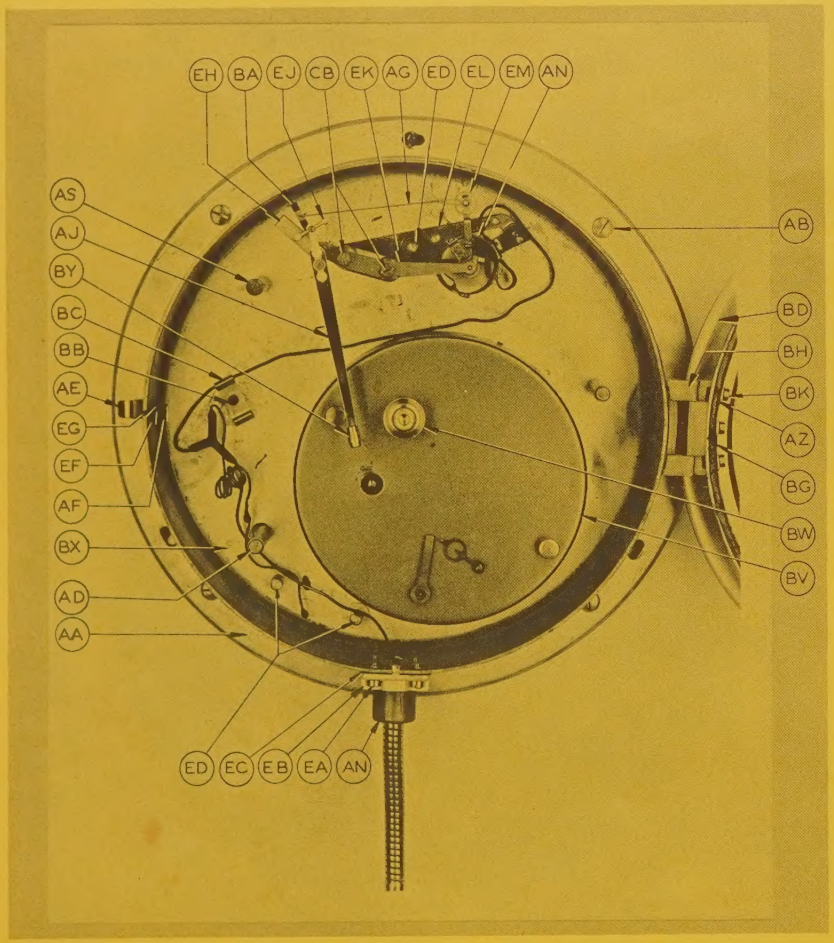


Figure 4 - Model 41 Wall-Mounted Case

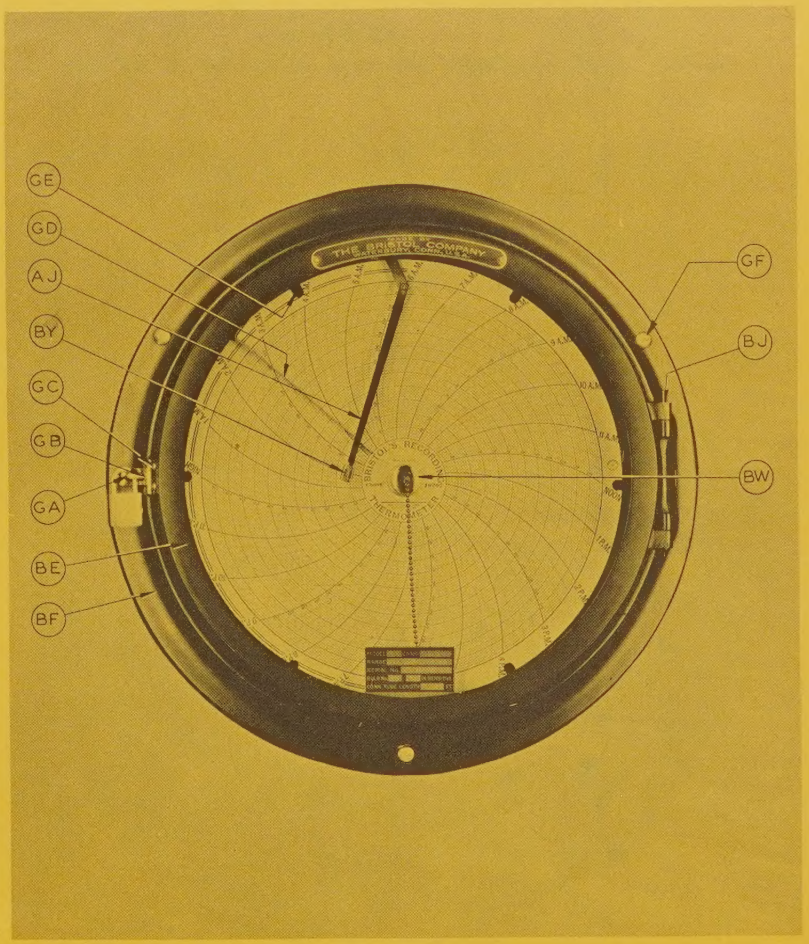


Figure 5 - Model 43 Flush-Mounted Case

BE SURE TO STATE MODEL AND SERIAL NUMBERS OF INSTRUMENT WHEN ORDERING PARTS

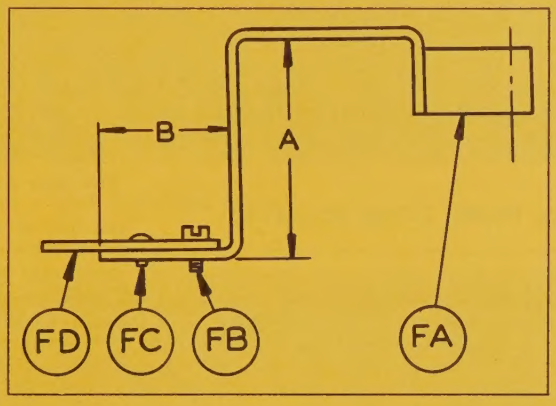
ITEM	DESCRIPTION	PART NUMBER
AA	Case - order by model and serial numbers of instrument	
AB	10-32 x 7/16" Flat-head screw	66554
AC	Washer	6965
AD	Dial post 2 3/8" long (button head)	33428
	Dial post 3 1/8" long (button head for 4-pen instrument)	43726
	Dial plate (not shown) Model 169	38221
AE	Hook	28583
AF	Loop	42113
AG	Connecting wire:	
	1 13/16" long	48073
	2 1/16" long	39896
	2 5/16" long	40153
	2 1/2" long	40152
	2 5/8" long	52353
	2 3/4" long	47315
	2 15/16" long	40645
	3 1/8" long	34777
	3 1/4" long	36515
	3 7/16" long	49759
	3 7/8" long	48078
	4" long	39898
	4 1/8" long	39899
AH	Base mounting (for breakdown of parts see Figure 7)	39621
AJ	Pen arms (see Figure 10, Page 11)	
AK	Spacer	44834
AL	6-40 x 1/2" Fillister-head screw	35882
AM	6-40 x 5/8" Fillister-head screw	19536
AN	Measuring element Thermometer system, either bimetallic or filled, including measuring element, bulb, mounting sleeve and tubing, must be repaired or replaced as a unit. For repairs, the system must be returned to The Bristol Company. In either case, give model, serial and chart or scale numbers of the instrument. For replacement of pressure system, including measuring element, tubing and connection mounting, give model, serial and chart or scale numbers of the instrument.	
AP	Pen-arm mounting complete for 2-pen instrument (for breakdown of parts, see Figure 7)	72636
	Old-style pen-arm mounting complete for 2-pen instrument (for breakdown of parts see Figure 8)	39535
	Pen-arm mounting complete for single-pen instrument (same as mounting 72636 except substitute spacer 71242 for connecting arm Item HH)	71977
	Pen-arm mounting complete for 3-pen instrument	39655
	Pen-arm mounting complete for 4-pen instrument	43716
AQ	#6 Lockwasher	43040
AR	6-40 x 1/4" Fillister-head screw	39770
AS	Dial post 2 3/8" long (screw head) includes Item CB	20333
	Dial post 3 1/8" long (screw head for 4-pen instrument) includes Item CB	43727
AT	Handle (metal) for 8" case	61304
NOT SHOWN	Handle (leather) for 10" case	19460
NOT SHOWN	Metal bracket for leather handle	2768
AU	Hygrovane mounting complete (includes Items AW, HC and HK)	73212
AV	6-40 x 7/16" Fillister-head screw	58073
AW	Post complete including shaft	89230
AX	Humidity element complete	73542
AY	8-36 x 5/16" Special-head screw for 8" case	38896
	8-36 x 3/8" Round-head screw for 10" case	37938
AZ	#8 Lockwasher	35639
	Flat washer for 10" case	34599
	8-36 Square nut for 10" case	30749
BA	Arm and hub complete	49266
	6-40 x 1/8" Bristo setscrew	82403
	5-40 x 1/8" Bristo setscrew used on older models	.....
BB	6-40 x 3/16" Fillister-head screw	18339
BC	Clip	9275
BD	Case door for 8" Model 41, 68 or 69	34482
	Case door for 10" Model 41, 68 or 69:	
	Bronze	41692
	Die Cast	35155

BE SURE TO STATE MODEL AND SERIAL NUMBERS OF INSTRUMENT WHEN ORDERING PARTS

ITEM	DESCRIPTION	PART NUMBER	
BE	Case door for 8" Model 43 (specify drill 30616 when ordering):		
	Bronze	41580	
	Aluminum	31774	
	Case foor for 10" Model 43	35997	
BF	Mounting flange for 8" Model 43 with door	35995	
	Mounting flange for 8" Model 43 without door:		
	Bronze	45893	
	Iron	49419	
	Mounting flange for 10" Model 43 with door:	35996	
	Mounting flange for 10" Model 43 without door:		
	Bronze	45894	
	Iron	49420	
BG	Gasket for door:		
	For 8" traveling oven thermometer (29½")	41781	
	For 8" Model 41, 68 or 69 (29½")	46282	
	For 10" Model 41, 68 or 69 (36½")	46282	
	For 8" Model 43 (29½")	46375	
	For 10" Model 43 (36½")	46375	
BH	Hinge for 8" Model 41, 68 or 69	29654	
	Hinge for 10" Model 41, 68 or 69:		
	Brass	37510	
	Die Cast	36770	
BJ	Hinge pin for Model 43	18097	
BK	8-36 x 9/16" Fillister-head screw	47747	
BL	Catch	28582	
BM	6-40 x 1/2" Slotless screw	14998	
BN	6-40 Hex nut	13775	
BP	Glass disk for 8" instrument	1425	
	Glass disk for 10" instrument	11878	
	Metal disk for traveling oven thermometer	74067	
BQ	Gasket under glass:		
	For 8" Model 41, 68 or 69 (26½")	39702	
	For 10" Model 41, 68 or 69 (32½")	39702	
	For 8" Model 43 (26½")	46374	
	For 10" Model 43 (32½")	46374	
BR	Split ring for 8" instrument	15001	
	Split ring for 10" instrument	15000	
BS	Leg	39825	
BT	10-32 x 9/32" Hex-head screw	32287	
BU	3/16" Lockwasher	35638	
	Flat washer	10599	
BV	Chart drive (see List, Page 10)		
BW	Chart hub - Old-style hub with cap and chain (shown in Figs. 4 and 5) is no longer available. Replace with either of the following:		
	Quickset hub for tapered shank (friction fit)	67965	
	Quickset hub for straight shank (with setscrew)	74986	
	6-40 x .110" Hex-socket setscrew	91012	
BX	Back - Order by model and serial numbers of instrument		
BY	Pen (see Figure 9, Page 10)		
CA	Receptacle	62231	
CB	6-40 x 1/4" Special-head screw	33339	
CC	10-32 x 5/16" Fillister-head screw	67029	
CD	Fan complete	87968	
	Note: Older model paddle-wheel-type fan and motor (not shown) is no longer available but may be replaced by group of parts 90674.		
CE	8-32 Hex nut	26966	
Not Shown	#8 Lockwasher	26076	
CF	10-32 x 3/4" Flat-head screw	66568	
CG	Pigtail	84444	
CH	5-44 x 3/16" Fillister-head screw	11898	
DA	Support bracket	91184	
DB	10-32 Hex nut	68556	
DC	6-40 x 5/16" Fillister-head screw	31427	
DD	Motor (see note under Item CD)	90329	
DE	Motor mounting plate	90330	
DF	10-32 Hex nut	62618	
DG	Post (9/16" long)	75140	
	13/16" Post for older models	73207	
DH	Spacer	53675	

BE SURE TO STATE MODEL AND SERIAL NUMBERS OF INSTRUMENT WHEN ORDERING PARTS

ITEM	DESCRIPTION	PART NUMBER
EA	10-32 x 5/16" Fillister-head screw	67029
	10-30 x 5/16" Fillister-head screw used on older models	35108
EB	Connection mounting bracket for thermometers:	
	Mounting bracket for side-connected instrument	48938
	10-32 x 7/16" Bristo cup-point setscrew	35598
	6-40 x 1/2" Fillister-head screw for joining two halves of bracket	35882
	Note: For mounting brackets other than that shown, specify model and serial numbers of instrument.	
EC	Gasket for connection mounting	41993
ED	Mounting stud	24157
EF	3-56 Hex nut for Item AF	23156
EG	Washer for nut Item EF	45692
EH	Base end and shaft complete	48640
EJ	Micrometer screw complete	82049
EK	Bearing plate	48113
EL	Base mounting complete (includes Items AG, BA, CB and EH to EM)	48111
EM	Lever arm complete (includes Items FA to FD):	



A (inches)	B (inches)	
1/4	13/32	40229
5/16	27/32	40231
11/16	13/32	49687
11/16	59/64	49689
15/16	13/32	49758
15/16	59/64	49691
1 3/16	13/32	40492
1 3/16	59/64	49685
1 7/16	31/32	40233
1 9/16	43/64	40236

FA	Clip	60864
FB	1-72 x 3/32" Special-head screw	82591
FC	Rivet	48911
FD	Adjustable arm	72298
GA	Loop	37134
GB	Hasp	17927
GC	6-40 x 9/32" Slotless-head screw	23945
Not Shown	6-40 Hex nut	13775
Not Shown	Spring catch	36993
GD	Pen-lifter arm for 8" instrument	27656
	Pen-lifter arm for 10" instrument	28032
Not Shown	Rivet for pen-lifter arm	27783
Not Shown	Washer for rivet	15683
GE	Dial plate for 8" instrument (includes Item GD)	38221
	Dial plate for 10" instrument (includes Item GD)	37540
GF	10-32 x 1/2" Fillister-head screw	66541
Not Shown	Panel insert (10-32 internal thread, 5/16"-32 external thread)	54954
	5/16"-32 Hex nut	40278
	10-32 x 3/4" Fillister-head mounting screw	66545
	Washer for screw 66545	53722

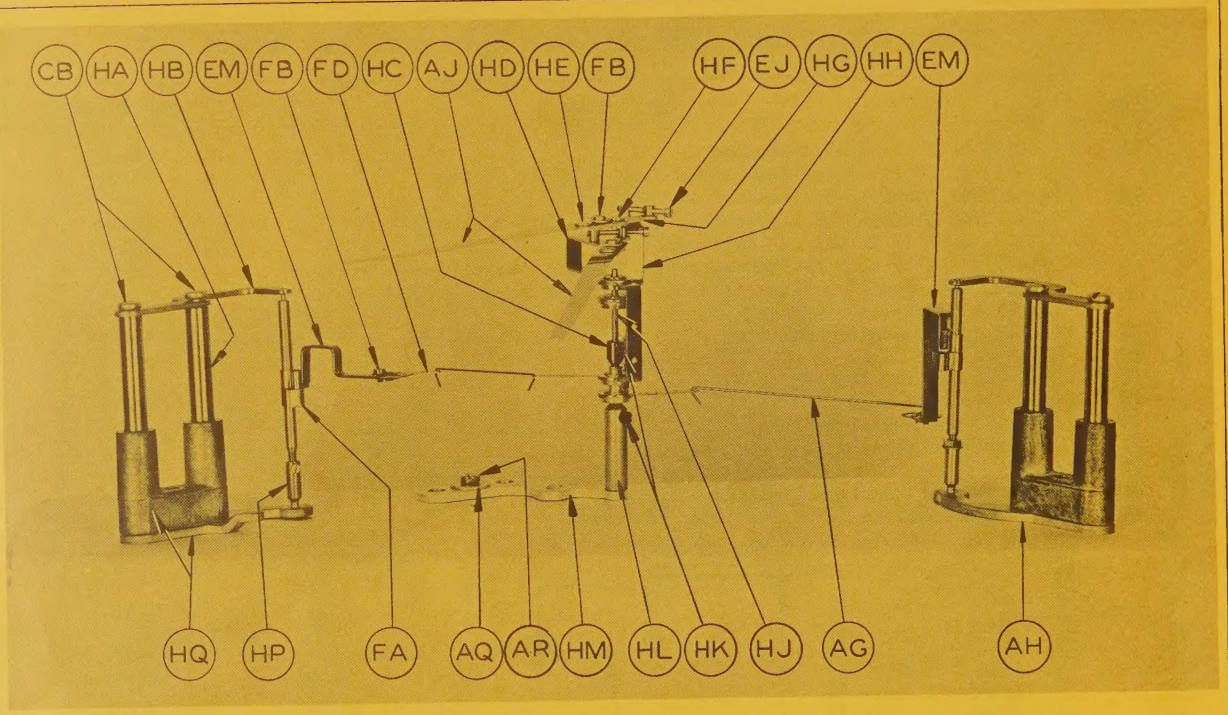


Figure 7 - New Model 2-Pen Mounting

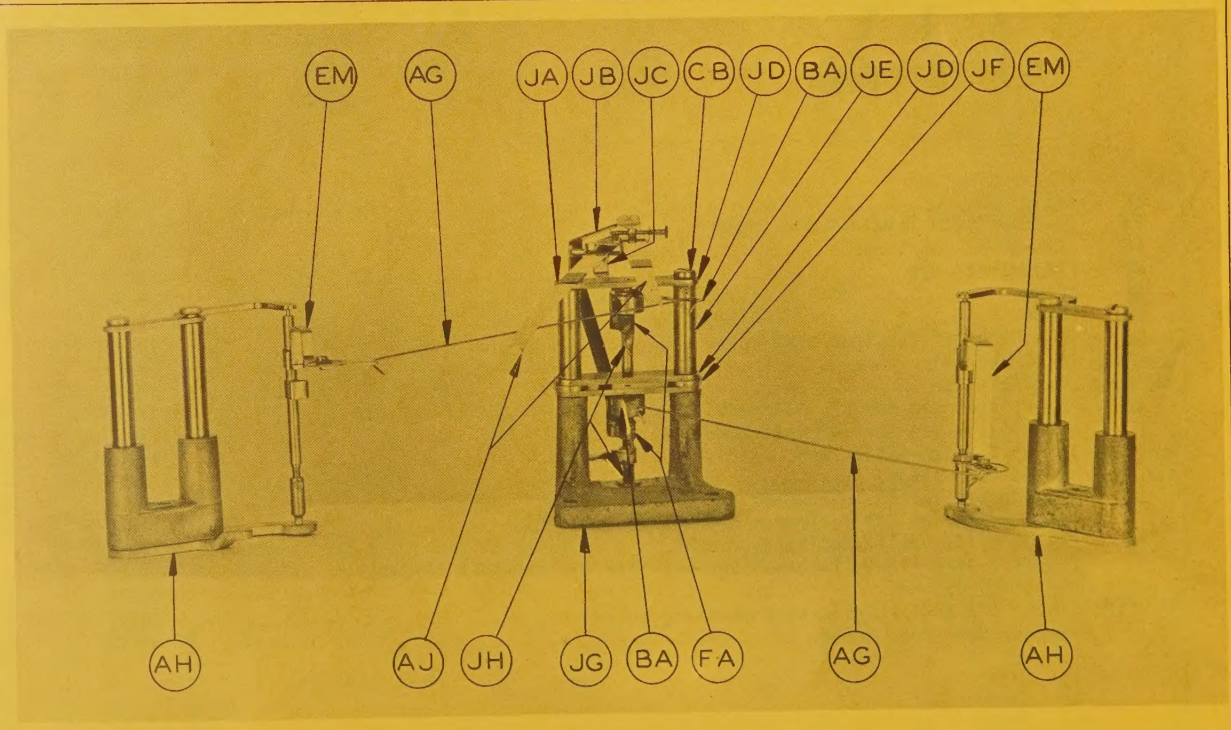


Figure 8 - Old Model 2-Pen Mounting

BE SURE TO STATE MODEL AND SERIAL NUMBERS OF INSTRUMENT WHEN ORDERING PARTS

ITEM	DESCRIPTION	PART NUMBER
HA	Post	39594
HB	Bearing plate	39595
HC	Hub	16357
HD	Connecting arm complete, including:	
	Items EJ, FB, FC, FD, HE, HG and Lever arm — order assembled	49265
	Hub — order assembled	71181
	Connecting arm — order assembled	72611
	Hub — order assembled	71865
	Arm — order assembled	68431
	Washer — order assembled	36647
	Arm — order assembled	72637
HE	Rivet	48649
HF	Rivet	48648
HG	Arm	48645
HH	Connecting arm complete, including:	
	Items EJ, FB, HE, HF, HG and Lever arm — order assembled	49265
	Hub — order assembled	71181
	Connecting arm — order assembled	72611
	Hub — order assembled	71865
	Arm — order assembled	68434
HJ	Shaft	72788
HK	2-64 x 1/8" Special-head screw	33522
HL	Post — order staked together	68432
HM	Base plate — order staked together	62007
HP	Shaft complete	34774
HQ	Base complete	75663
JA	6-40 x 1/4" Flat-head screw	31874
JB	Connection arm	34780
JC	Connection arm	36698
JD	Bearing plate	34772
JE	Post	34770
JF	Washer	556
JG	Base	39534
JH	Shaft	34773
	NOT SHOWN	
	Parts for Model 43 Case	
	10-32 x 3 1/8" Round-head screw	36012
	10-32 Hex nut	68556
	10-30 Hex nut used on older models	31868
	Glass clip for mounting glass	34980
	4-48 x 3/32" Round-head screw	33708

INKS

DESCRIPTION			AMOUNT					
COLOR	FORMULA		1 OUNCE	4 OUNCES	½ PINT	1 PINT	1 QUART	1 GAL.
Red	1	Standard Ink Temperature Range: +10°F to +110°F	6883	47975	47980	47985	47990	65500
Blue	2		19084	47976	47981	47986	47991	65501
Green	3		28134	47977	47982	47987	47992	65502
Black	4		31673	47979	47984	47989	47994	65504
Purple	5		26475	47978	47983	47988	47993	65503
Red	41	Special Ink Temperature Range: -65°F to 0°F	85601	85602	85603	85604	85605	85606
Green	42		85607	85608	85609	85610	85611	85612
Blue	43		85613	85614	85615	85616	85617	85618
Red	51	Temperature Range +100°F to +400°F	83429	83430	83431	83432	83433	83434

Note: For quick-drying ink, specify #20815 together with color and quantity desired. Brown, orange and yellow are also available as standard or quick-drying ink.

INK BOTTLES ONLY

DESCRIPTION	PART NUMBER
1 oz. (without cap and dropper)	74610
Cap and dropper for 1 oz. bottle	74611
1/4 oz. (without cap and dropper) for portable recorders	70628
Cap and dropper for 1/4 oz. bottle for portable recorders	86546

BE SURE TO STATE MODEL AND SERIAL NUMBERS OF INSTRUMENT WHEN ORDERING PARTS

CHART DRIVES

DESCRIPTION	PART NUMBER
Spring-driven single-speed chart drives:	
12 hour	A6779
24 hour	A6778
48 hour	A6780
7 day	A6781
Spring-driven two-speed chart drives:	
1 hour - 3 hour (for oven thermometers)	A6901
8 hour - 2 hour (for oven thermometers)	A6900
24 hour - 96 minute	A6786
3 day - 24 hour	A6784
7 day - 24 hour	98125
7 day - 48 hour	A6783
For breakdown of parts see separate parts list.	
Electric single-speed chart drives:	
30 minute, 96 minute, 8 hour, 12 hour, 24 hour, 48 hour, 72 hour, 7 day, 30 day — These speeds are available for 115 or 230 volt, 25, 50 or 60 cycle power supply. Specify speed, voltage and frequency when ordering.	
Note: When ordering replacement chart drives, always specify part number 87830 in addition to the chart drive itself.	

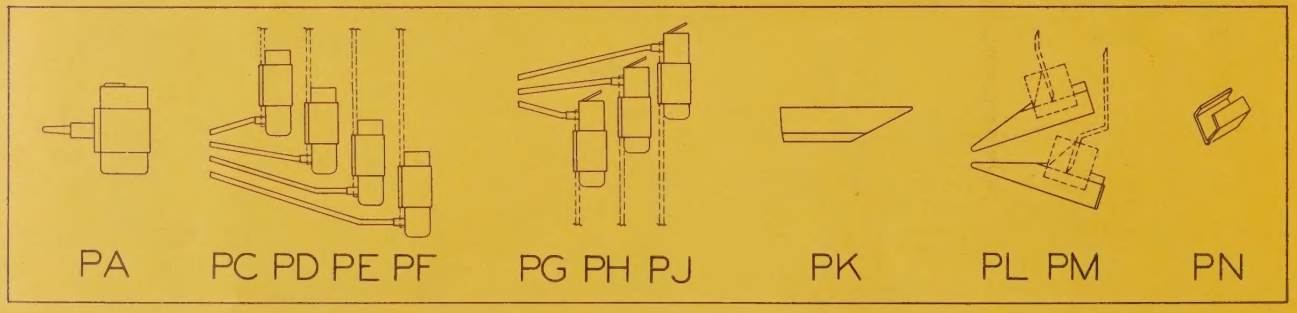


Figure 9 - Pens

ITEM	DESCRIPTION	PART NUMBER
PA	Standard fountain pen	30425
PC	Inverted multiple fountain pen (closest to chart)	32914
PD	Inverted multiple fountain pen (second from chart)	32915
PE	Inverted multiple fountain pen (third from chart)	32916
PF	Inverted multiple fountain pen (fourth from chart)	28577
PG	Upright multiple fountain pen (closest to chart)	30451
PH	Upright multiple fountain pen (second from chart)	30450
PJ	Upright multiple fountain pen (third from chart)	30449
PK	Standard V-pen	42648
PL	Multiple V-pen (open back)	42649
PM	Multiple V-pen (closed back)	42650
PN	V-pen holder (always furnished as part of V-pen arm but may be ordered separately)	1886

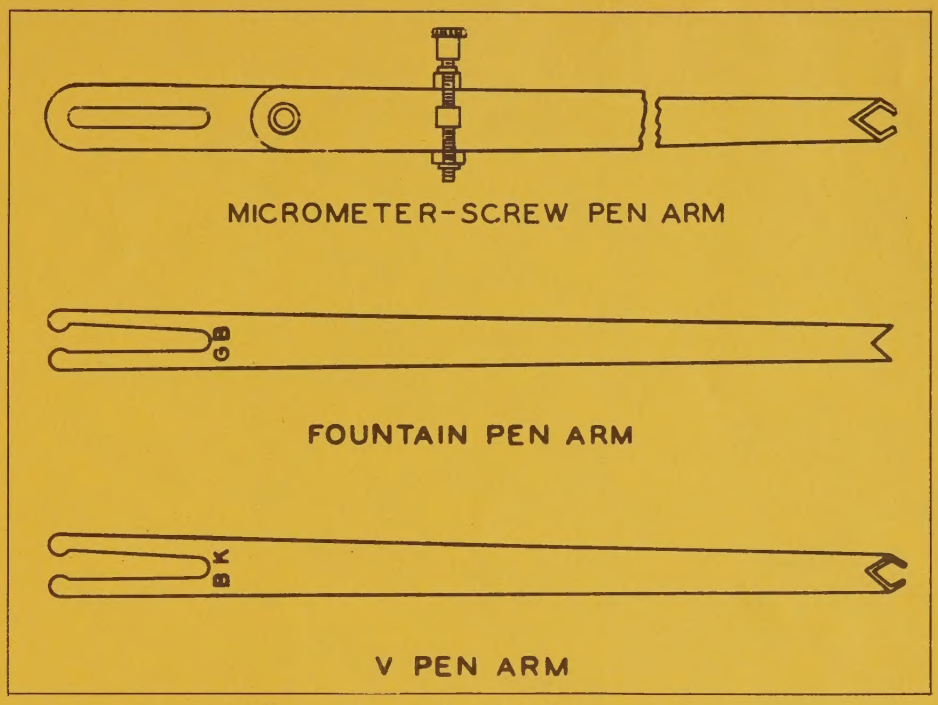


Figure 10 - Pen Arms

DESCRIPTION	PART NUMBER	
Pen arm marked:		
CA	60287	
CB	49702	
CD	49703	
CG	49704	
CH	49705	
CI	61418	
CL	61971	
CR	62083	
CS	62084	
CT	62085	
CU	66281	
DA	60288	

DESCRIPTION	PART NUMBER	
Pen arm marked:		
DB	49706	
DC	49707	
DE	60289	
DF	60290	
DG	49708	
DH	49709	
DI	62080	
DJ	62081	
DK	62082	
DL	61419	
DR	63450	
DS	66901	

DESCRIPTION	PART NUMBER	
V-pen arm with micrometer screw:		
Single arm for 10" instrument	23138	
Single arm for 8" instrument	24154	
Inside arm for 10" multiple-pen instrument	34779	
All other arms for 10" multiple-pen instrument	34778	
Inside arm for 8" 2-pen instrument	34856	
Outside arm for 8" 2-pen instrument	34855	
Fountain-pen arm with micrometer screw:		
Order from V-pen arm listing above but specify for use with fountain pen.		

100598